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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-----------------------------|--------------------|----------------------|---------------------|-----------------|
| 09/977,484 | 10/15/2001 | Ralf Janke | Micronas.6437 1533 | |
| 7590 09/14/2005 | | EXAMINER | | |
| Patrick J. O'Sh | iea | | WACHSMA | N, HAL D |
| O'Shea, Getz an | d Kosakowski, P.C. | | | |
| 1500 Main Street, Suite 912 | | ART UNIT | PAPER NUMBER | |
| Springfield, MD 01115 | | | 2857 | |

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE

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| APPLICATION NO./ CONTROL NO. | FILING DATE | FIRST NAMED INVENTOR / PATENT IN REEXAMINATION | | ATTORNEY DOCKET NO. | |
|---------------------------------|-------------|--|----------|---------------------|--|
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| | | | ART UNIT | PAPER | |
| | | | | 09082005 | |
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Commissioner for Patents

Hal D Wachsman Primary Examiner Art Unit: 2857

| | Application No. | Applicant(s) | | | | |
|---|---|--|--------------|--|--|--|
| Office Action Comment | 09/977,484 | JANKE, RALF | · | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Hal D. Wachsman | 2857 | | | | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet w | ith the correspondence ac | ldress | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNI 36(a). In no event, however, may a will apply and will expire SIX (6) MON c, cause the application to become Al | CATION. reply be timely filed NTHS from the mailing date of this of BANDONED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on <u>05 Ju</u> | uly 2005 | | | | | |
| · <u> </u> | s action is non-final. | | | | | |
| 3) Since this application is in condition for allowa | | ters prosecution as to the | e merits is | | | |
| closed in accordance with the practice under E | • | • | o monto io | | | |
| Globba in accordance with the practice under a | ex parto quayro, 1000 o.e. | 7. 11, 400 0.0. 210. | • | | | |
| Disposition of Claims | | | , | | | |
| 4)⊠ Claim(s) <u>1-3 and 6-9</u> is/are pending in the app | lication. | | | | | |
| 4a) Of the above claim(s) is/are withdra | wn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-3 and 6-9</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | • | • | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | er. | | | | | |
| 10)⊠ The drawing(s) filed on <u>05 July 2005</u> is/are: a) | □ accepted or b) □ object | cted to by the Examiner. | | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyar | nce. See 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correct | ion is required if the drawing | (s) is objected to. See 37 C. | FR 1.121(d). | | | |
| 11) The oath or declaration is objected to by the Ex | caminer. Note the attache | d Office Action or form P | ΓΟ-152. | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of: | priority under 35 U.S.C. { | § 119(a)-(d) or (f). | | | | |
| Certified copies of the priority document | 1.⊠ Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority document | s have been received in A | application No | • | | | |
| Copies of the certified copies of the prio | rity documents have been | received in this National | Stage | | | |
| application from the International Bureau | u (PCT Rule 17.2(a)). | • | | | | |
| * See the attached detailed Office action for a list | of the certified copies not | received. | | | | |
| · | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | | Summary (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | _ | s)/Mail Date nformal Patent Application (PT0 | O-152) | | | |
| Paper No(s)/Mail Date <u>2-4-05</u> . | 6) Other: | | | | | |

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1. Claims 1-3 and 6-9 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 1, lines 6-7, cite "adjustable coefficient values" however it appears that this should be "said adjustable coefficient values" as there is already antecedent basis for this in the line before. This same type of problem also occurs in claim 3, line 7. Claim 1, line 7, cites "a sensor output signal" but is this actually referring to an output signal of the sensor element already cited in part (i) of the claim? This same type of problem also occurs in claim 3, line 7. Claim 2, line 2, cites "said updated coefficient values" which it appears should be "said updated adjustable coefficient values". Claim 9, lines 2 and 3, cite "said sensor unit" which it appears should be "said integrated circuit sensor unit". The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwabara et al. (5,150,301) in view of the Applicant's Admissions of the prior art.

As per claim 1, Kashiwabara et al. (Abstract, col. 10 lines 6-14) disclose "a sensor element that provides a sensed signal in response to a measurement variable". Kashiwabara et al. (Abstract, col. 3 lines 60-62, col. 5 lines 65-67) disclose "a memory device that stores adjustable coefficient values". Kashiwabara et al. (Abstract, figure 1, col. 10 lines 16, 17) disclose "a sensor signal processing unit that processes said sensed signal...to provide a sensor output signal on a output line indicative of the measurement variable". Kashiwabara et al. (Abstract, figure 1, col. 10 lines 18-55) disclose "wherein said integrated circuit sensor unit receives updated adjustable coefficient values... and stores said updated adjustable coefficient values in said memory device". It appears though that Kashiwavara et al. does not clearly disclose though the integrated circuit sensor unit aspect. However, the Applicant's Admissions of the prior art (BACKGROUND OF THE INVENTION, page 22, lines 4-14, of the substitute specification filed 7-5-05) teaches this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the Applicant's Admissions of the prior art to the invention of Kashiwabara et al. as specified above because the incorporation of all the described features on a single integrated circuit would lead to enhanced economy of size.

As per claim 2, Kashiwabara et al. (Abstract, col. 4 lines 48-50) disclose the feature of this claim.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwabara et al. (5,150,301) in view of the Applicant's Admissions of the prior art and Vines et al. (5,006,841).

As per claim 3, Kashiwabara et al. (Abstract, col. 10 lines 6-14) disclose "a sensor element that provides a sensed signal in response to a measurement variable". Kashiwabara et al. (Abstract, col. 3 lines 60-62, col. 5 lines 65-67) disclose "a memory device that stores adjustable coefficient values". Kashiwabara et al. (Abstract, figure 1, col. 10 lines 16, 17) disclose "a sensor signal processing unit that processes said sensed signal... to provide a sensor output signal on a second line indicative of the measurement variable". Kashiwabara et al. (Abstract, figure 1, col. 10 lines 18-55) disclose "wherein said integrated circuit sensor unit receives updated adjustable coefficient values...and stores said updated adjustable coefficient values in said memory device" with the exception of clearly disclosing the use of the first line which is a line for receiving power for receiving the coefficient values. In addition, Kashiwabara et al. does not clearly disclose "a integrated circuit sensor unit that receives power via a first line". However, the Applicant's Admissions of the prior art (BACKGROUND OF THE INVENTION, page 22, lines 4-14, of the substitute specification filed 7-5-05) teaches the integrated circuit sensor unit and it is inherent in the art that there must be a line to supply power to the integrated circuit for the IC to be operable. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the Applicant's Admissions of the prior art to the invention of Kashiwabara et al. as specified above because the incorporation of all the described features on a single

integrated circuit would lead to enhanced economy of size. It appears though that the combination of Kashiwabara et al. and the Applicant's Admissions of the prior art still does not clearly teach the use of the first line which is a line for receiving power for receiving the coefficient values. However, the coefficient values are data and Vines et al. (Abstract, col. 1 lines 35-41) teach the sending of both power and data over the same lines. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Vines et al. to the invention of Kashiwabara et al. and the Applicant's Admissions of the prior art as specified above because as taught by Vines et al. (col. 1 lines 24-29) there was a desirability to use a large number of transducers with a minimum of transmission lines and power requirements while realizing a high degree of accuracy and reliability in the acquisition of data representing the values of the monitored physical quantities.

5. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwabara et al. (5,150,301) in view of the Applicant's Admissions of the prior art as applied to claim 2 above, and further in view of Blossfeld et al. (6,424,143).

As per claim 6, Blossfeld et al. (Abstract, col. 3 lines 1-9) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Blossfeld et al. to the invention of Kashiwabara et al. and the Applicant's Admissions of the prior art as specified above because as taught by Blossfeld et al. (col. 2 lines 10-15) that by using the internal circuit measurement values, the tendency of the measurement conditions of the sensor module to change can be recognized at the proper time in advance, here prior to a

breakdown of sensor function, i.e. before the output measurement signal can no longer be evaluated or is no longer present.

As per claim 7, Blossfeld et al. (Abstract, col. 3 lines 1-9) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Blossfeld et al. to the invention of Kashiwabara et al. and the Applicant's Admissions of the prior art as specified above because as taught by Blossfeld et al. (col. 2 lines 10-15) that by using the internal circuit measurement values, the tendency of the measurement conditions of the sensor module to change can be recognized at the proper time in advance, here prior to a breakdown of sensor function, i.e. before the output measurement signal can no longer be evaluated or is no longer present.

As per claim 8, Blossfeld et al. (Abstract, col. 3 lines 1-9) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Blossfeld et al. to the invention of Kashiwabara et al. and the Applicant's Admissions of the prior art as specified above because as taught by Blossfeld et al. (col. 2 lines 10-15) that by using the internal circuit measurement values, the tendency of the measurement conditions of the sensor module to change can be recognized at the proper time in advance, here prior to a breakdown of sensor function, i.e. before the output measurement signal can no longer be evaluated or is no longer present.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwabara et al. (5,150,301) in view of the Applicant's Admissions of the prior art and

Vines et al. (5,006,841) as applied to claim 3 above, and further in view of Blossfeld et al. (6,424,143).

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As per claim 9, Blossfeld et al. (Abstract, col. 3 lines 1-9) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Blossfeld et al. to the inventions of Kashiwabara et al. and Vines et al. as well as the Applicant's Admissions of the prior art as specified above because as taught by Blossfeld et al. (col. 2 lines 10-15) that by using the internal circuit measurement values, the tendency of the measurement conditions of the sensor module to change can be recognized at the proper time in advance, here prior to a breakdown of sensor function, i.e. before the output measurement signal can no longer be evaluated or is no longer present.

7. Applicant's arguments filed 7-5-05 have been fully considered but they are not persuasive. On page 40 of the reply the Applicant argues with respect to claim 1 that "The system of Kashiwabara neither discloses nor suggests that one of the sensors disclosed therein includes a sensor element that provides a sensed signal, which is processed within the sensor unit with coefficient values to provide a sensor output signal indicative of the measurement variable." However, it was not just Kashiwabara et al. that was used to teach this but rather Kawshiwabara et al. in view of the Applicant's Admissions of the prior art. The Examiner also respectfully notes the following:

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208

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USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

No arguments were presented with respect to the Applicant's Admissions of the prior art and the feature of claim 1 that this was used to teach. With respect to the Kashiwabara et al. reference the Applicant's arguments stated "see col. 5, lines 38". However, it was not this section of Kashiwabara et al. that was used in the 35 U.S.C. 103 rejection of claim 1 but rather it was the Abstract, figure 1, col. 3 lines 60-62, col. 5 lines 65-67, col. 10 lines 6-14, 16-55, of the Kashiwabara et al. reference that was applied to the claimed features and no arguments were presented with respect to these sections of the reference.

At the top of page 41 of the reply, the Applicant states "In addition, a fair and proper reading of the other prior art references neither discloses nor suggests a sensor that processes its sensed signal as set forth in claim 3." However, after this statement there is no further elaboration as to why the other prior art references neither disclose or suggest the sensor of claim 3. In addition, with respect to claim 3, no arguments were presented with respect to the Applicant's Admissions of the prior art and the Vines et al. reference.

At the top of page 42 of the reply the Applicant argues with respect to claim 3 that "Specifically, no sensor...in Kishawabara discloses providing a sensed signal that is processed within the integrated circuit sensor unit using coefficient values stored within a memory device, also located within the integrated circuit sensor unit...". However, similar to claim 1, it was not just Kashiwabara et al. that was used to teach this but

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rather Kawshiwabara et al. in view of the Applicant's Admissions of the prior art. The Examiner also again respectfully notes the following:

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to the art rejections of claims 6-9 no arguments were presented by the Applicant with respect to the Blossfeld et al. reference and the features of those claims that the Blossfeld et al. reference was used to teach.

- 8. No claims are allowed.
- 9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D. Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hal D Wachsman
Primary Examiner
Art Unit 2857

HW September 8, 2005